

ADDITIONS TO THE FLORA OF COLORADO--IX

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NEW RECORDS FOR COLORADO
INDIGENOUS TAXA

ASTRAGALUS SESQUIFLORUS S. Wats., Proc. Amer. Acad. 10:345. 1875 (CRU). MONTROSE CO.: Hwy. 141, Dolores River 4 mi W of Ura-
van, T48N R17E S23, 5,500 ft. alt., on rocky slope at base of
slickrock (Entrada Formation), 1 May 1982, Cudlip 45. A range ex-
tension from northeastern New Mexico and southeastern Utah. A
handsome species forming prostrate mats rooting in the sandstone
cracks, catching drifting sand and filling up with it to form soft
hemispherical cushions. The racemes of small purple flowers hard-
ly exceeding the cushion, and small leaves with 7-11 leaflets, not
at all mucronate, are diagnostic.

CENTAURIUM EXALTATUM (Griseb.) W. F. Wight ex Piper, Contrib.
U. S. Nat. Herb. 11:449. 1906. MESA CO.: grassy moist flat in and
around Populus grove at mouth of Fruita Canyon, 4,700 ft. alt.,
Colorado National Monument, 29 Aug. 1982, Siplivinsky 5041.

CONOPHOLIS ALPINA Liebm. var. *MEXICANA* (A. Gray ex S. Wats.)
Haynes, Sida 3:347. 1969 (ORO). LAS ANIMAS CO.: east edge of Bar-
ello (Barela) Mesa, in a valley draining north into Colorado from
between Barelo and Johnson Mesas; dry slope under Quercus gam-
belii, 18 July 1982, J. H. Robertson 16320. An extension of range
northward from New Mexico.

MENTZELIA ARGILLOSA Darlington, Ann. Mo. Bot. Gard. 21:153.
1934 (LOA). GARFIELD CO.: on steep clay slopes of colluvial fans
of the Roan Cliffs above Parachute Creek near Union Oil Co. head-
quarters, 4 miles N of Parachute (Grand Valley), 26 Aug. 1982,
Weber, Harner & Clark 16359.

This species was found in the course of an ecological impact
survey by Harner-White Ecological Consultants. Previously known
only from a small area in Sevier County, Utah, M. argillosa is
considered a threatened species (Welsh 1978), because "mining for
gypsum and other minerals shrinks the area occupied by this dis-
tinctive plant each year." The type material does not show the
rhizomes, and Darlington did not describe the habit of the plant
other than to call it a perennial. Her description of the stem
("glabrous") is incorrect. It is not at all glabrous although the
trichomes eventually are eroded away and the stem does become
polished in the process.

Mentzelia argillosa is one of a number of unrelated species
in different families that are uniquely adapted to survival in
steeply sloping and constantly moving talus or scree. The plant

grows in low clumps, arising from slender, crooked white caudices that arise in groups at about six inches below ground level from a centimeter-thick horizontal rhizome that extends a meter or more in length. The caudices and rhizomes are elastic and thus are not broken as the shifting detritus of the substrate slides down-slope. Examples of this type of growth habit are found in Chaenactis alpina, Collomia debilis and C. larsenii, Erigeron leio-merus, Ligularia porteri, Stellaria americana and S. irrigua, and Senecio fremontii.

MUHLBERGIA DEPAUPERATA Scribn., Bot. Gaz. 9:187.1884 (GRM). MESA CO.: Colorado National Monument, head of Devil's Kitchen Canyon, T1S R1W S31, 5,500 ft. alt., around sandstone depressions in which temporary rain-water pools form, 7 Sept. 1982, Siplivinsky 5130. The collection represents a range extension north from Arizona and New Mexico.

PANICUM HILLMANII Chase, J. Wash. Acad. Sci. 14:345. 1934. (GRM). BACA CO.: 1 mi E of Bartlett; roadside ditch and edge of field; common in the area, 13 Aug. 1982, R. L. McGregor 33619. PROWERS CO.: roadside ditch and edge of field, 4 mi N of Holly; common and with P. capillare, 12 Aug. 1982, McGregor 33556. We are grateful to Dr. McGregor for communicating these specimens.

SPOROBOLUS FLEXUOSUS (Thurb.) Rydb., Bull. Torr. Bot. Club 32:601. 1905 (GRM). MESA CO.: Colorado National Monument, T1S R10W S17, 4,800 ft. alt., at mouth of Monument Canyon, 30 Aug. 1982, Siplivinsky 5066. The collection represents a range extension north from Arizona and New Mexico.

ADVENTIVE SPECIES

ABUTILON THEOPHRASTI Medikus, Malvenfam. 28. 1787 (MLV). MESA CO.: a weed in gardens, Colorado River Valley at Grand Junction, 2 July 1981, Joan Young 51.

ERAGROSTIS POAEOIDES P. Beauv. ex R. & S., Syst. Veg. 2:574. 1817 (GRM). MESA CO.: Grand Junction, weed in gardens, 2 July 1981, Joan Young 53; Colorado National Monument, Black Ridge trail, 3 Sept. 1982, Siplivinsky 5103.

MENTHA PIPERITA L., Sp. Pl. 576. 1753 (LAB). BOULDER CO.: Left Hand Canyon at Buckingham Park; streambottom in foothill meadow, 5,800 ft. alt., 17 Aug. 1961, A. Bush 64.

POTENTILLA ARGENTEA L., Sp. Pl. p. 497. 1753 (ROS). LARIMER CO.: Skyland Ranch near Lamb Spring, N of Estes Park, 8,000 ft. alt., 21 July 1982, Ruth A. Nelson 10838.

RANGE EXTENSIONS

HEUCHERA RUBESCENS Torr. in Stansbury (SAX). Previously known in Colorado from Sleeping Ute Mountain, Montezuma Co., last collected 23 June 1927 by Cottam 2414 (BRY). MESA CO.: Uncompahgre Plateau; Unawep Canyon at jct. Hwy. 141 and 402, T13SR15W S16, 7,040 ft. alt., crevices of Pre-Cambrian granite cliffs of near old historic quarry, 17-18 July 1982, Siplivinsky & Beck 4183.

NAMA DICHOTOMUM (Ruiz & Pavon) Choisy (HYD). MESA CO.: Colorado National Monument, head of Devil's Kitchen canyon, T1S R1W S31, 5,500 ft. alt., around sandstone depressions in which temporary rainwater pools form, 7 Sept. 1982, Siplivinsky 5122. This is the first Colorado collection from west of the Continental Divide.

PORTULACA PARVULA A. Gray (POR). MESA CO.: Colorado National Monument: head of Devil's Kitchen Canyon, T1S R1W S31, 5,500 ft. alt., open pinon-juniper woodland, 7 Sept. 1982, Siplivinsky 5127. Known previously from a single collection in southeastern Colorado, this is the first collection from the western slope.

LITERATURE CITED

Darlington, Josephine. 1934. A monograph of the genus Mentzelia. Ann. Mo. Bot. Gard. 21:103-226.

Welsh, Stanley L. 1978. Endangered and threatened plants of Utah: a reevaluation. Great Basin Nat. 38:1-18.